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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,228	03/19/2001	Noriyoshi Shida	040894-5642	6917

9629 7590 05/02/2003

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EXAMINER

HECKENBERG JR, DONALD H

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 05/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

14

Office Action Summary

Application No.

09/810,228

Applicant(s)

SHIDA ET AL.

Examiner

Donald Heckenberg

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 01 August 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 1722

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 10, 2003 has been entered.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakagawa et al. (U.S. Pat. No. 5,560,939).

Nakagawa teaches an injection mold. The injection mold comprises a pair of mold bodies (1 and 2) which are disposed in a manner such that circular-shaped mold forming surfaces are opposed to each other, thereby forming a disc shaped mold space therebetween (figure 1). Nakagawa teaches the injection mold to comprise a conduction member (58) which is fitted to a first of

Art Unit: 1722

the pair of mold bodies so as to communicate with the outside through a conduction path for conducting material from the outside into the molding space (see figure 1). Nakagawa further teaches a first heat regulating member (structures forming passage 53) within the conduction path, and a second heat regulating member (structures forming passage 55) at a position opposing the first heat regulating member on the second mold body side of the pair of mold bodies.

Nakagawa discloses "warmly conditioned fluid flow-through paths 52, 53, 54, and 55 are provided in the mold bodies 4 and 8 on the top and bottom molds 1 and 2 so that the temperature of the mold bodies 4 and 8 can be set a predetermined value" (column 8, lines 18-22). Thus, although Nakagawa teaches an intended use of the apparatus operating with warmly conditioned fluid, the reference discloses that the effect is that the mold bodies can be set a predetermined temperature value. Therefore, the apparatus could be used in a manner such that the heat regulating members act to suppress heat from transferring to the mold bodies. It is well settled that the intended use of an apparatus is not germane to the issue of patentability of the apparatus. If the prior art structure is capable of performing the claimed use, then it meets the claim limitation(s). In re Casey, 370 F.2d 576, 580 152 USPQ 235, 238 (Cust. & Pat. App.

Art Unit: 1722

1967); In re Otto, 312 F.2d 937, 939, 136 USPQ 458, 459 (Cust. & Pat. App. 1963). In the instant case, as Nakagawa's heat regulating members are capable of being used in a manner to suppress heat, the reference anticipates all of the claim limitations as described above.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Asai (U.S. Pat. No. 5,593,710).

Asai teaches an injection molding apparatus. The injection mold comprises a pair of mold bodies (50 and 70) which are disposed in a manner such that circular-shaped mold forming surfaces are opposed to each other to form a disc-shaped mold space (see figure 4). A conduction member (25) is fitted into a first of the pair of mold bodies so as to communicate with the outside through a conduction path (23) for conducting molten material injected from the outside into the molding space. A first member (72) is disposed between the conduction member and the first mold body (see figure 1). A second member (52) is positioned opposing to the first member on the second mold body side of the pair of mold bodies (see figure 4).

Although Asai does not described the first and second members (72 and 52) as being for suppressing heat, the members would inherently act as such. The first and second members,

Art Unit: 1722

regardless of the material from which they are made, will have a heat capacity that will act to suppress at least some heat from flowing through them. Therefore, Asai anticipates all of the claim limitations.

5. Applicant's arguments filed on February 10, 2003 have been considered, but are moot in view of the new grounds of rejection presented above.

6. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. See the reasons for indicating allowable subject matter in Paper #12.

7. Claim 5 is allowed.

8. The following is a statement of reasons for the indication of allowable subject matter in claim 5:

The prior art of record fails to teach or suggest a mold for injection molding of a disc substrate comprising a pair of mold bodies which are disposed in a manner that circular shaped mold forming surfaces thereof are opposed to each other to form

Art Unit: 1722

a disc-shaped mold space therebetween, a conduction member fitted to a first of the pair of mold bodies so as to communicate with the outside through a conduction path for conducting molten material injected from the outside into the disc-shaped mold space, wherein the mold is provided with a molding space for suppressing heat within the conduction path from being transmitted to the first of the pair of mold bodies disposed at a portion of the second of the pair of mold bodies opposite the conduction member, and the molding space having the same volume as the conduction member as recited in claim 5. Note the molding space for suppressing heat is not the same element as the disc-shaped molding space.


The closest prior art taught by Inoue is described in previous Office Actions. Inoue teaches a molding space in the second of a pair of mold bodies (different from the primary molding space (10) in which the disc is molded), but fails to teach or suggest the molding space to be the same volume as the conduction member.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Heckenberg whose telephone number is (703) 308-6371. The


Art Unit: 1722

examiner can normally be reached on Monday through Friday from 9:30 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at (703) 308-0457. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for responses to non-final action, and 703-872-9311 for responses to final actions. The unofficial fax phone number is (703) 305-3602.



Donald Heckenberg
April 29, 2003



JAMES P. MACKEY
PRIMARY EXAMINER

4/30/03